Addendum I

June 2005

Legacy System Decommissioning Evaluation Package for NWS Field Office Use

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1 Introduction

The Legacy System decommissioning Evaluation Package provides the instructions, responsibilities and forms used by the Evaluation Official (EO) at field offices for conducting and documenting a legacy system decommissioning evaluation.

General Overview

The *decommissioning process* is performed at each office to verify its ability to terminate the use of legacy systems in use at field sites in preparation for installation of the Radiosonde Replacement System (RRS). The *decommissioning evaluation* is, thus, a series of checklist items to be verified, satisfactorily, during the decommissioning process conducted at the field site. As each checklist item is deemed satisfactory, it is checked off from the list. In a number of cases, checklist items may be considered Anon-applicable@ to the office environment; in which case, these items would not be evaluated. Checklist items not considered satisfactory are handled in several ways as follows:

- The problem is corrected on-site through procedure or other action
- No correction to the problem is imminent, and as a result, further action is required

Each of these options will be discussed more in detail below. In any case, no unsatisfactory items are allowed to remain. Instead, the decommissioning of the legacy system is suspended until the problem(s) is/are resolved.

- Once the evaluation is finished, successfully, the EO completes the enclosed forms and assembles them into the *Decommissioning Readiness Report (DRR).* The office management, i.e., Meteorologist-in-Charge (MIC), signs the report recommending approval and then forwards it to the region. The regional Decommissioning Focal Point reviews and makes any corrections as necessary. Then, the Regional Systems Operations Division (SOD) Chief signs the report, indicating final approval of the DRR. The original report is then sent to NWSH for filing with a copy left at the region.
- When the decommissioning report has been signed by the MIC, the site:
- Will not take any more soundings with the legacy system after the last official sounding has been taken based on the date and time indicated in the Public Notification Statement (PNS) or Technical Information Notification (TIN) message.
- Will deactivate the legacy system in preparation for disposal activities associated with the removal of the legacy system in order to install the RRS.

Content of Package

The Legacy System Decommissioning Evaluation Package consists of the following:

Decommissioning Readiness Report Cover Page

- The Decommissioning Report Cover Page (included in Appendix I-B to this addendum).
- Instructions for completion of the cover page see Section 2)

Decommissioning Recommendation/Approval Forms

- Description of the Decommissioning Recommendation/Approval Forms.
- The Decommissioning Recommendation/Approval Form (included in Appendix I-B to this addendum).
- Instructions for completion of the recommendation/approval form (see Section 2).

Legacy System Decommissioning Checklist

- Legacy System Decommissioning Checklist (included in Appendix I-B).
- Decommissioning Evaluation Criteria (Appendix I-A to this addendum) used for providing guidelines to the EO
- General instructions for completing the checklist (see Section 2).

Appendix I-A provides the Decommissioning Evaluation Elements and Criteria used by the EO to perform the evaluation during the decommissioning evaluation period, normally, no more than one week in duration. The elements and criteria are the guidelines for assisting the EO during the process. When all the pertinent criteria for the site have been successfully met, the decommissioning report is prepared and ready for review and approval. When the office manager for the site has approved the decommissioning readiness report, the legacy system can be deactivated in preparation for removal and disposal. The disposal of the equipment is predicated on the MIC signature for the site.

Required Background Reading

Since decommissioning of legacy systems is intertwined with the installation of RRS, the RRS Deployment Plan and the Site Installation Plan, is required reading for all decommissioning EOs. These plans provide an overview of the entire RRS deployment process from the descriptions of RRS and how it will be interfaced to other office systems.

- **Responsibilities for Conducting the Site Evaluations**

  The responsibilities for the conduct of evalutions are as follows:

  - **Legacy System Decommissioning Manager (LSDM)**: The LSDM in the Office of Operational Systems/Field Systems Operations Center/Observing Systems Branch (OPS22) is responsible for overall management of the decommissioning process. Specifically, the LSDM, with reference to the conduct of legacy system evaluations:

    a. Distributes web versions of the Legacy Systems Decommissioning Plan to the appropriate Regional RRS Focal Point.

    b. Provides guidance and support, if necessary, in the resolution of deficiencies which can be addressed with Regional/NWSH resources; coordinates and approves solutions in need of NWSH involvement; serves as approval authority for regionally/locally-developed decommissioning notes.

    c. Tracks the status of the decommissioning and reports to NWS management as required.

  $ **Regional Decommissioning Focal Point**: The Regional Decommissioning Focal Point is responsible for the management of all decommissioning activities within their region.

  Specifically, each Regional Focal Point:

  a. Provides web site for downloading evaluation packages to the site staff.

  b. Coordinates the resolution of deficiencies which can be addressed by Regional/NWSH resources and obtains approval of the solutions from the LSDM.

  c. Coordinates the resolution of deficiencies requiring NWSH involvement with the LSDM in preparation for SOD Chief Signature.

d. Reports status of decommissioning activities in the region to Regional Management.

$ **MIC**: The MIC is responsible for overall management of the decommissioning activities within the MIC's geographic area of responsibility.

Specifically, each MIC:

a. Designates an individual to serve as EO and establishes the date and time of the last official upper air observation from the legacy system.

b. Provides the EOs with guidance and support, as required, in the resolution of deficiencies which would result in an unsatisfactory rating.

c. Reviews and confirms the completeness and accuracy of DRR by signing the report and forwarding it to the Regional Decommissioning Focal Point.

$ **EO:** The EO is responsible for the conduct of the decommissioning readiness review. In particular, the EO:

a. Conducts the evaluation, with assistance from appropriate operations, maintenance, and system administration personnel, and indicates evaluation elements are satisfactory by appropriate entries in the decommissioning checklist for the site.

b. Initiates actions as required, in coordination with the MIC, to correct deficiencies uncovered during the evaluation.

c. Compiles the DRR for MIC signature; confirms the completeness and accuracy of the evaluation by signing it; retains copies of the report and supporting materials; and transmits the **original** one to the region.

d. Reports on status of decommissioning activities to the region.

e. Works with OPS22 and the Regional Decommissioning Focal Point to collect and ship expendables to another location

2 Instructions for Completing the Decommissioning Report

Below are instructions for completing each of the forms comprising the Decommissioning Readiness Report. Electronic copies of each portion of the report, in a Word or PDF format, will be made available to the site through the world-wide-web.

Decommissioning Readiness Report Cover Page

The Decommissioning Report cover page is included in Appendix I-B to this addendum. In most cases, the information in blocks 1 through 4 will be self explanatory. The remaining portions of the documentation will be discussed below. Appendix I-C provides a an example of a completed cover page.

Steps in completing the cover page are:

Step 1. Type the **Office SID** and **Office Name**, information onto the cover.

Step 2. Type the **Office Type** as follows: WFO or NWSO/DCO.

Step 3. The approving official will be the Regional SOD Chief.

Step 4. The **Actual Date Decommissioned** will be completed after the decommissioning event has occurred, i.e., the system is deactivated commensurate with either the TIN or PNS. Enter either 00 or 12 UTC for the last observation time.

Decommissioning Checklist

The decommissioning evaluation criteria (Appendix I-A) is the detailed set of guidelines used by the EO to determine compliance with the site requirements. Read the criteria carefully for a clear understanding of what is being asked. If you have about any aspect of the criteria, call your regional FP. The Decommissioning Checklist (refer to Appendix I-B to this addendum) reflects the evaluation criteria, which are grouped into several categories:

- *Preliminary Activities including Legacy system Property Accounting*

  Verifies there is nothing technical preventing the decommissioning of the legacy system, and the necessary transfer/property documentation has being prepared.

- *Preparations for Decommissioning Communications Links/Equipment.*

  Office staff verifies they no longer have a requirement for the communications equipment or links, locally. Validates, through information provided by each site to users, which equipment, systems, and communications links will no longer be in service as a result of the decommissioning process. Notifications will be made to other NWS offices, other government agencies including, external users,

- Forecast and Warnings

  Verifies through everyday experience and, in some cases, actual procedures to be performed, no longer required to support the warning and forecast mission of each office.

During its evaluation, the legacy system will be operated continuously in its **operational mode**, i.e., coded messages transmitted**.** After the PNS/TIN has been issued for the decommissioning event of the last observation from the site, no additional upper air (all RADAT messages, PARTs A/B messages, and PARTs C/D) official NWS products will be issued. The next official coded messages will be with the RRS.

The EO will draw on the expertise, assistance, and input of their NWS office staff, as required, while performing the evaluation. This is because the EO is not expected to be an expert on all the decommissioning criteria. Suggested inputs from various staff are included to the right of each criteria as well as to what type of office it applies to. Some items require forecaster input, while others require input from the hydrometeorological technician or electronics staff to complete. There may be a need to write a decommissioning note clarifying an action taken by the site to complete the checklist. Enter all notes in the Remarks section of the checklist.

Steps in completing the forms are:

Step 1. Verify the Office Name and Office SID on the Decommissioning Checklist form.

Step 2. Review the evaluation elements in Appendix I-A to this addendum. Before beginning the evaluation, determine if all of the criteria are clear enough to begin and which ones apply to your location. If the criteria are not clear, ask office staff to assist with understanding the criteria. Call the Regional Focal Point, if questions remain.

Step 3. When the EO is comfortable with understanding the process and the criteria, begin performing the evaluations:

a. Gather the required information from the operations and electronics staff as necessary. These do not have to be done in any order, rather, complete the ones easiest to accomplish first.

b. When the criterion for an evaluation element is met, use the checklist to mark the corresponding "S" (Satisfactory) column with a check mark or AX@. If a checklist is not-applicable to the site, then enter a check under the N/A column. **Note, all checklist items must have a check in either the ASat.@**

or AN/A@ columns. Commissioning notes will be designated by an “x” in the Note column, followed by the actual note in the Remarks section.

c. If deficiencies are found which would prevent assignment of a satisfactory rating to an evaluation element, notify the office management as appropriate:

$ Initiate necessary corrective action(s), and/or
$ Develop a solution (additional maintenance, training, clarification, or a commissioning note, see Section 2.3). Enter the note at the bottom of the checklist under Remarks.

d. Implement commissioning notes and, when satisfactory achievement of the evaluation element is demonstrated, mark the corresponding "Sat." (Satisfactory) column with a check mark and document the note under the "Remarks" section of the checklist.

Step 4. Complete the form entitled, List of ART Equipment to be Decommissioned:

a. Enter the Deactivation Date under either ART-1 or ART-2

b. Enter the quantities (including spare units on site) for each item on the list.

Step 5. Complete the form entitled, Site Component Decommissioning Recommendation/Approval:

a. Enter the Office SID/WMO Number in Block 1. For Example, enter KCAR, 72712

b. Enter the Office Location information in Block 2. e.g., Caribou WFO, ME, ER.

c. For Block 3, enter the System as either: ART-1, ART-2, W9000

d. Enter the type of radiosonde in Block 4 as follows: B2, RS80, LORAN, or LORAN/GPS

e. The projected deactivation date is the same as what was placed into the PNS/TIN messages. If more than one PNS/TIN was issued due to changes in the projected date, re-enter the new date and either 00 or 12 UTC.

f. Enter the day you began and ended the evaluation in Block 6. Note, the evaluation should take approximately 1-week.

g. Enter your name, title, phone number in Block 7

h. **Sign** and **date** the form when you have completed your part of the activity.

i. Forward the report to the MIC for his/her signature.

Legacy System Decommissioning Readiness Report

The DRR consists of the **original copies** of following in the correct order:

- Decommissioning Readiness Report Cover Page.
- Decommissioning Recommendation/Approval Form
- Decommissioning Checklist, including an annotated list of equipment.
- Documentation of Not-Applicable elements and decommissioning notes.

Processing the Completed Report

After the EO has completed the report, it will be sent to the Regional RRS Focal Point, as appropriate, **via express mail**. A copy of the report is to be retained by the EO along with the checklist worksheet and these instructions.

When received at the Regional Office, the Regional RRS Focal Point reviews the material for completeness and verifies the information is correct. Questions, issues, etc. pertaining to the report must be worked out between the office and the regional office. After this has been accomplished, the Regional Focal Point will **fax** a copy of the complete report for LSDM evaluation prior to the Regional/Center Director signing the report. The LSDM will coordinate with the Regional Focal Point and NWSH staff any issues or special situations, as necessary. The LSDM will inform the region when the faxed report can be approved by the region.

The final step in the process at the regional or center level is to have the Regional SOD Chief sign the report. Then the **original** report with signatures and dates in **ink** will be forwarded to the LSDM **via express mail**, who will post the necessary information to the web and place the completed report in the Technical reference library.

APPENDIX I-A

Decommissioning Evaluation Criteria

1. PRELIMINARY ACTIVITES INCLUDING LEGACY SYSTEM PROPERTY AND EXPENDABLE ACCOUNTING		CRITERIA APPLIES TO:	INPUT PROVIDED BY:
	NOTE: The following criteria are meant to serve as guidelines for the EO when conducting the decommissioning evaluation. The EO should query the office staff as often as possible to determine whether these criteria are being satisfied adequately.		
1a	**Site Deactivation Date Determined** The site personnel in coordination with the RRS Deployment Manager and region will discuss and determine the date and time of the last legacy system upper air observation. Notify the Deployment Manager and Regional Decommissioning Focal Point of the date and last observation time via email. The MIC reserves the right to delay the deactivation of the legacy system if hydro-meteorological conditions or some other legitimate reason exists. The site will notify the RRS Deployment Manager, immediately, if such a condition arises. Refer to element 2c for the proper notification of users regarding the deactivation date. Enter the official date into the Site Component Decommissioning Recommendation/Approval Form, Block 5.	ALL	EO
1b	**Facilities Checklist Signed/ PCBs Removed** Verify the site has completed their evaluation of the facility in preparation for the installation of the RRS in accordance with the RRS deployment Plan. Notify the region is there are any checklist items needing resolution before the legacy system can be decommissioned. Verify through contact with regional facilities staff that all PCB-related upper air equipment has been properly disposed of from the site. Contact your region if any questions related to the PCBs have risen.	ALL	SFT
1c	**Electronic Technician Staff Trained on RRS** At least one Electronics Technician must have completed the RRS Maintenance course at the NWSTC prior to the decommissioning of the legacy system. This ET must be available during the installation and checkout of the RRS. Failure to complete this item will be cause for not decommissioning the legacy system, since at least 1 ET must be able to maintain the new system after installation.	ALL	ET

1e	**Equipment Inventory** Using the enclosed forms, identify all equipment (including spares on-site) to be decommissioned by this site. A comprehensive list of candidate ART site components which can be decommissioned is found in Appendix I-B. Note, W9000 site components (including spares) will documented on a separate sheet and sent to WSH/OPS22.	ALL	ET/EO
1f	**Property Accounting** Verify regional property transaction request forms supplied, are prepared for removing legacy system site components have been cleared for removal from the property list. Ensure all major components having been bar-coded as indicated in Engineering Handbook (EHB-13) are accounted for in preparation for equipment disposal. For each hardware site component planned for decommissioning, enter the quantity of components (including spares on hand) next to the equipment/expendable description as shown in Appendix I-B, List of ART Equipment to be Decommissioned. Enter the planned deactivation date, when known. Examples of expendables are radiosondes, floppy disks, and printer paper.	ALL	ET/EO
1g	**Disposal Instructions** Verify the site has received appropriate disposal instructions for the legacy system from NWSH and region. If the site has not received them in a timely manner, then notify your region disposal focal point for further guidance. Note, sites having W9000 systems will have their equipment shipped to the Sterling Research and Development Center.	ALL	ET
	GSA Notified Verify GSA has been given proper notification of intent to dispose of those site components of the legacy systems eligible for local disposal.	ALL	ET

1h	<u>Expendable Accounting</u> The field office is not to discard any radiosondes after decommissioning of the legacy system. Instead, document the number of radiosondes to be redirected on the WS Form B-85 and the number of rejected radiosondes in the WS Form H-6. Also denote the date of the last observation taken with the legacy system on the WS Form B-29 in the Remarks. Also, include the number of spare batteries, hygristors, floppy disks, and printer ribbons/ printer paper on the WS Form B-85 in the Remarks Section of Part II. Do not wait until the end of the quarter to complete the H-6 form or wait to send rejected radiosondes to NRC. Rather, have them sent within 1-week of the decommissioning event. Notify the region that these activities have been completed.	ALL	EO
1i	<u>Optical Theodolite</u> The Optical Theodolite will **not** be disposed of after decommissioning of the legacy system.	ALL	EO

2. PREPARATIONS FOR DECOMMISSIONING COMMUNICATIONS LINKS/EQUIPMENT		CRITERIA APPLIES TO:	INPUT PROVIDED BY:
2a	MicroART Connection to LDAD Disconnected The Micro-Art port is configured as a Csportd port (simulates a pseudo terminal). Disconnect this line from the LDAD on the official notification day for decommissioning after element 2c has been completed. Although noted for decommissioning with this report, the site must not reconnect the legacy system unless a new notification message has negated the first one issued and a new decommissioning date established for users.	AWIPS Sites	AWIPS FP
2b	Non-Collocated Office Connections Verify the non-co-located office (i.e., no AWIPS LAN) dial connection has been deactivated in accordance with regional procedures. Note, for sites not co-located with their AWIPS, contact the appropriate person to ensure this switch has been made correctly.	Contract Sites	AWIPS FP/EO
2c	Notification Message At least thirty (30) days before the legacy system is decommissioned, a Public Notification Statement (PNS) will be issued by the site indicating when the legacy system will be deactivated in preparation for its decommissioning and disposal. Any local users of upper air data should be contacted, personally, to ensure they are aware of the change or disruption in operations. The PNS shall include information indicating when the event is to occur and the approximate amount of downtime expected before the RRS is activated. Additional PNSs must be issued if there are significant changes to the site's plans. For example, if the deactivation date/time has changed by more than 12 hours, a new PNS will be issued. An example of a PNS can be found in the decommissioning plan as Exhibit 1.	ALL	EO
2d	Region/OPS22/MIRS Notified Verify a copy of all notification messages has been sent directly to their respective region, OPS22, OS7, and to MIRS@noaa.gov via e-mail. MIRS staff will update the decommissioning date accordingly for internal/external coordination.	ALL	EO
2e	OCONUS Connections - TBD	Alaska/Pacific	EO

3. FORECAST AND WARNINGS		CRITERIA APPLIES TO:	INPUT PROVIDED BY:
3a	Forecast/Warning Operations Verify through contacts with the forecast and operations staff that deactivating the upper air system on the projected date will not cause adverse impacts to the office. The projected transition will be approximately 1-to-2 weeks. If there is a perceived impact on operations needing attention, the EO is to discuss it first with the MIC and then the region.	ALL	Forecast Staff
3b	Senior Duty Meteorologist (SDM)/Local Users The field office responsible for the upper air function will coordinate the deactivation date with the SDM and local universities involved with NWS operations and research, and others who could be impacted by this event.	ALL	EO
3c	Upper Air Staff Prepared for RRS Verify at least 3 office staff members have completed the following activities in preparation for RRS deployment: Review of the training video Completed the training materials in preparation for the use of RRS Successfully passed the proficiency or certification exams. If these have not been completed by the time 2c above has been conducted, then contact your region for further guidance.	ALL	EO
3d	**Archive Sent to NCDC** Verify preparations have been made to transmit all observations from the legacy system--for the given month the system is to be decommissioned--to NCDC. Ensure this is accomplished within 1-week of the decommissioning event.	ALL	EO

APPENDIX I-B

Decommissioning Evaluation Forms

Site Component Decommissioning Report for Legacy Upper Air Systems

May 2005

Office Name:

Office ID (SID):

NWS Region:

Approving Official:

Actual Date Decommissioned:

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
Office of Systems Operations

SITE COMPONENT DECOMMISSIONING RECOMMENDATION/APPROVAL FORM

1. Office SID/WMO Number:	2. Office Location (Name, State, Region):
3. SYSTEM:	4. RADIOSONDE:

5. PROJECTED DEACTIVATION DATE: _____

6. Start of Evaluation (Date): Completion of Evaluation (Date):

7. Evaluation Official (Name, Title, Phone Number):

_____ _____ _____

8. Evaluation Official Signature: _____ Date: _____

OFFICE RECOMMENDATION FOR DECOMMISSIONING

I, the undersigned, recommend this be decommissioned for official use by the National Weather Service.

9. Office Manager Title:_____

10. Manager's Name: _____

11. Signature: _____ Date: _____

REGIONAL RECOMMENDATION FOR DECOMMISSIONING

As Systems Operations Division Chief, I approve this upper air legacy system be decommissioned for official use by the National Weather Service.

12. Region:_____

13. Name: _____

14. Signature: _____ Date: _____

DECOMMISSIONING CHECKLIST				
Location Name/State:		SID:		
1.	**PRELIMINARY ACTIVITES INCLUDING LEGACY SYSTEM PROPERTY & EXPENDABLE ACCOUNTING**	**Satis.**	**N/A***	**Note**
1a	Site Deactivation Date Determined			
1b	Facilities Checklist Signed/PCBs Removed			
1c	Electronic Technician Staff Trained on RRS			
1d	Equipment Inventory			
1e	Property Accounting			
1f	Disposal Instructions			
1g	Optical Theodolite			
1h	Expendable Accounting			
1i	Optical Theodolite			
2.	**PREPARATIONS FOR DECOMMISSIONING COMMUNICATIONS LINKS/EQUIPMENT**			
2a	MicroART Connection to LDAD Disconnected			
2b	Non-AWIPS Connections			
2c	Notification Message			
2d	Region/OPS22/MIRS Notified			
2e	OCONUS Connections			
3.	**FORECAST AND WARNINGS**			
3a	Forecast/Warning Operations			
3b	Senior Duty Meteorologist (SDM)/Local Users			
3c	Upper Air Staff Prepared for RRS			
3d	Archive sent to NCDC			

*Document significant Not-Applicable ratings under Remarks

REMARK:

LIST OF ART EQUIPMENT TO BE DECOMMISSIOINED

Description	**ART-1**	**Enter Qty**	**ART-2**	**Enter Qty**
Deactivation Date:				
RF Assembly	J170-1A1A1		J170-1A1A1	
Pylon assembly	J170-1A1A2-1		J170-1A1A2-2	
Receiver/antenna control unit	J170-1A3A1		J170-1A3A1	
Elevation drive assembly	J170-1A3A2A1		J170-1A2A2	
Azimuth drive assembly	J170-1A3A3A1		J170-1A3A2	
Angle time assembly	J170-3A2		J170-3A2	
Master control unit	J170-3		J170-3	
Remote control unit front panel	J170-5A1		J170-5A1	
MicroArt/minicomputer interface cable	J170-W37A			
Pedestal housing/antenna assembly cable	J170-W101		J170-W101	
Pedestal housing/azimuth unit cable	J170-W701		J170-W701	
Pedestal housing to azimuth unit cable	J170-W702		J170-W702	
Pedestal housing to elevation assembly cable	J170-W951		J170-W951	
XT computer	M003-1		M003-1	
ARCTIC card	M003-1A1A1		M003-1A1A1	
SPU-11 interface card	M003-1A1A4		M003-1A1A3	
RS80-57H radiosonde, new	J030-1		J030-1	
B2 radiosonde, new	J031-1		J031-1	
Loran-C radiosonde, new	J032-1		J032-1	
RS80-57H-RC radiosonde (reconditioned)	J035-1		J035-1	
B2 radiosonde (reconditioned)	J036-1		J036-1	
Optical Theodolite				
Hayes Smart Modem, Type 300	M003-6		M003-6	
5.25” Floppy Disks				
Spare Batteries				
Spare Hygristors				
Printer Accessories, e.g., ribbons				